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a fraction of a second, to an electric pulse of high voltage, pores in cell membranes open, referred to as electroporation (Zimmerman et al. *J. Membr. Biol.* 84, 269-285 (1985)), which is frequently used as transformation technique. Bacteria, yeast and in some cases also mammalian cells and plant cells can, in specific conditions, be transformed by means of electroporation. Also in this case, a continuous development of the technique is in progress (see U.S. international patent applications PCT/US97/16721 and PCT/US98/16042). In the two methods described above, the cell envelope is opened sufficiently long for the DNA molecule to enter the cell. The third and last developed method for transformation is so-called lipofection (Old and Primrose, in *Principles of Gene Manipulation: An Introduction to Gene Manipulation*, Blackwell Science (1995)) where the foreign DNA is enclosed in/binds to a cationic liposome which fuses with the outer membrane of the target cell. There is one more commercial technique for transformation of plant cells, where a plant part selected for the purpose is bombarded with small gold grains which are prepared with the foreign gene (Boynton J.E. et. *Science* 240, 1534-1538, 1988). Such gene transfer has been developed for transformation of other tissues, such as bacteria, fungi, insect and mammalian cells (Johnston S.A. *Nature* 346, 776-777, 1990).

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